

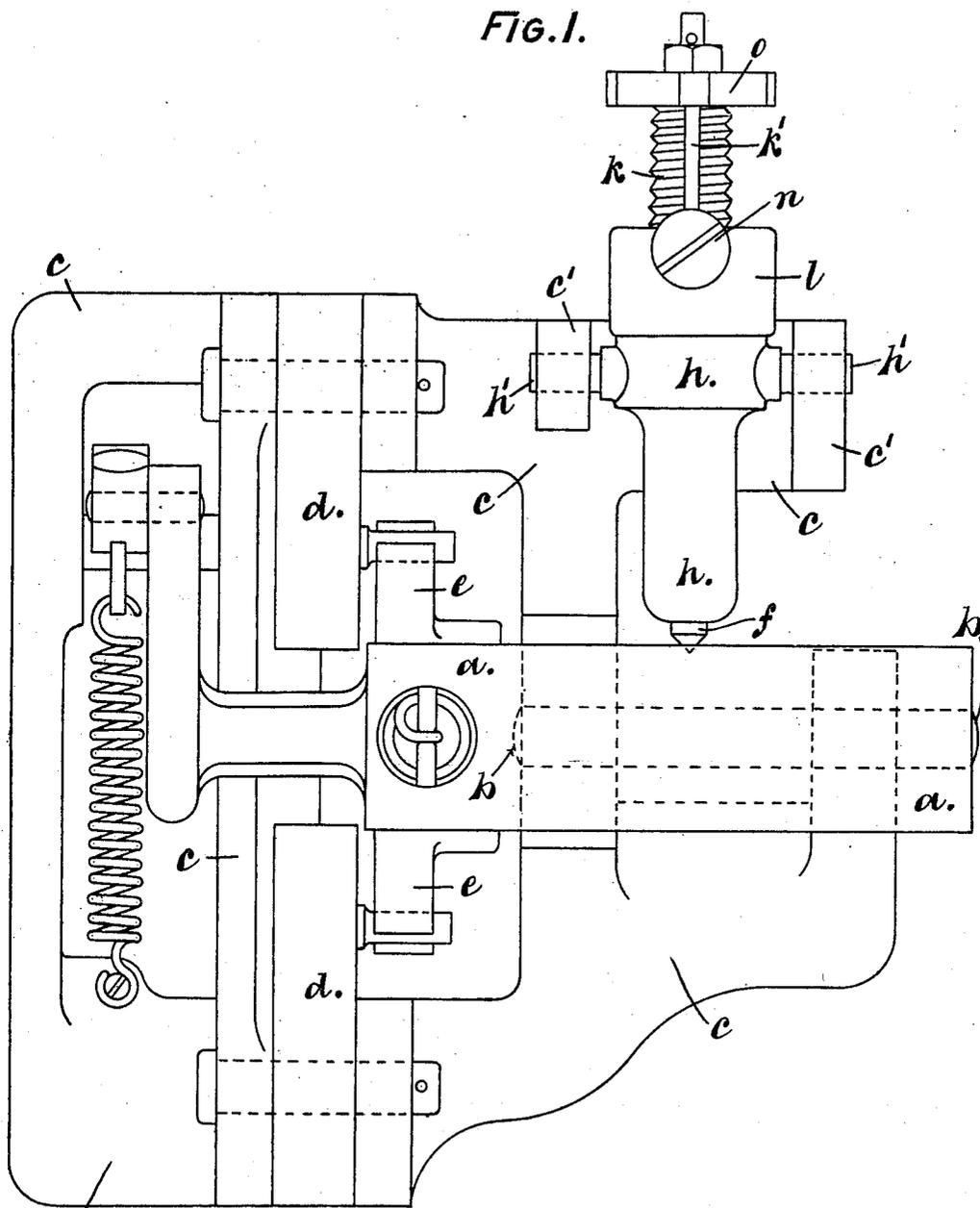
J. TAYLOR & D. H. EVANS.
ENGINE OR LIKE GOVERNOR.

APPLICATION FILED NOV. 7, 1903.

NO MODEL.

3 SHEETS—SHEET 1.

FIG. 1.



WITNESSES
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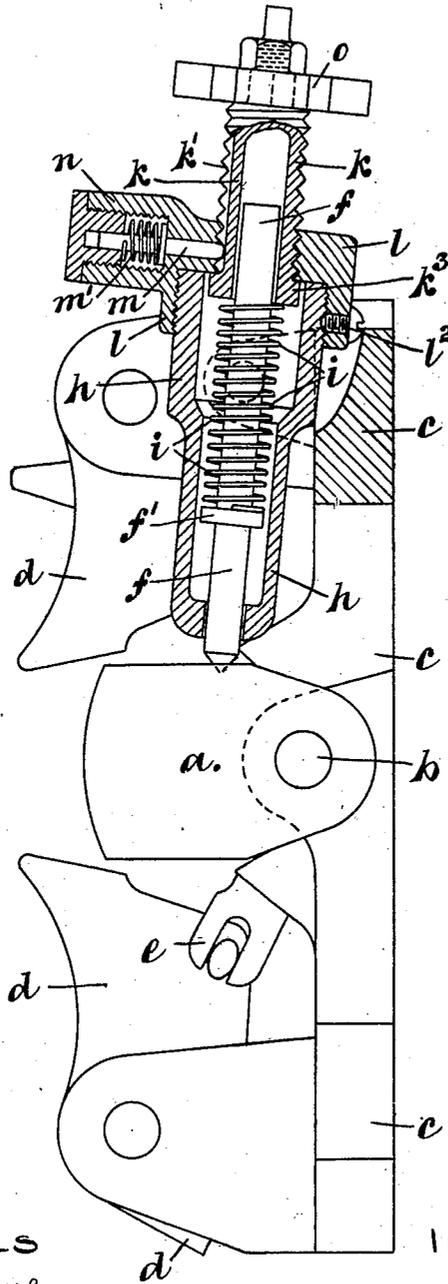
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3 SHEETS—SHEET 2.

FIG. 2.



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3 SHEETS—SHEET 3.

FIG. 3.

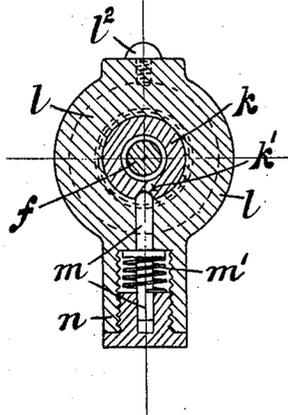


FIG. 4.

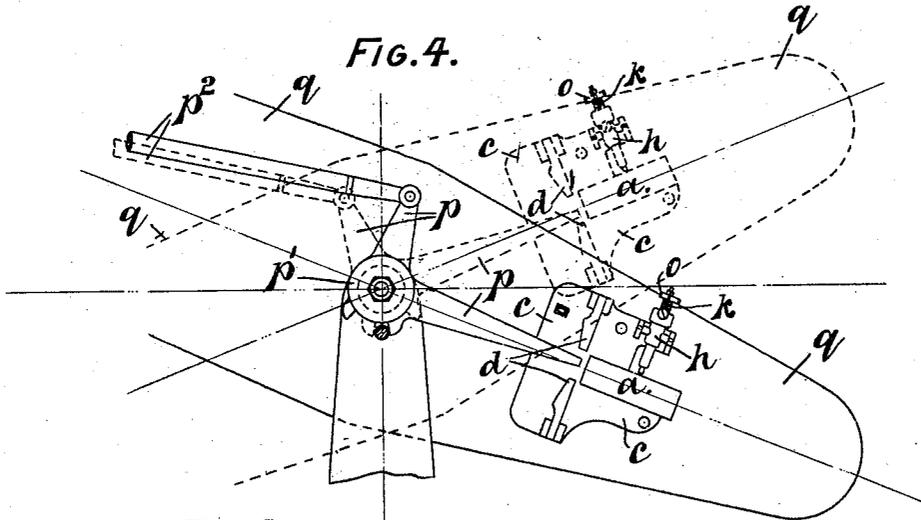
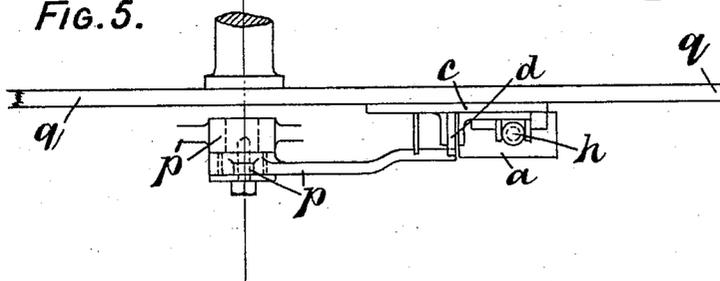


FIG. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN TAYLOR AND DAVID HENRY EVANS, OF LIVERPOOL, ENGLAND.

ENGINE OR LIKE GOVERNOR.

SPECIFICATION forming part of Letters Patent No. 763,573, dated June 28, 1904.

Application filed November 7, 1902. Serial No. 130,374. (No model.)

To all whom it may concern:

Be it known that we, JOHN TAYLOR and DAVID HENRY EVANS, subjects of the King of England, and residents of 7 Strand street, Liverpool, in the county of Lancaster, England, have invented certain new and useful Improvements in Engine or Like Governors, of which the following is a specification.

This invention has reference to governors of the type which are mounted on a vibrating or reciprocating part of or connected with an engine or machine and have a weight which when a normal rate of vibration or reciprocation takes place moves out of its normal position and actuates, through a suitable connecting part, a motor fluid-controlling valve or part of the steam or other engine.

The object and effect of the present invention is to provide an improved means for regulating the action of the weight, whereby the governor is adapted to be capable of coming into action within a considerable range of speeds, so that an engine may be governed to run at one rate of speed or others, accordingly as may be desired.

The invention is hereinafter set forth with reference to the accompanying drawings, Figure 1 being a front elevation, and Fig. 2 an end elevation, partly in section. Fig. 3 is a plan in section taken at X X, Fig. 2. Fig. 4 is a side elevation showing the governor applied to the vibrating lever—say an air-pump lever—of a steam-engine; and Fig. 5 is a plan of same.

Referring to the drawings, *a* is the weight, which is mounted horizontally on the pin *b*, carried by the governor-frame *c*, and *d* represents the pawls, which are operated and governed by the jaw-arms *e*, connected with the weight *a*, and which operate a lever *p*, mounted on an axis *p'*, coincident with the axis about which the air-pump lever *q* vibrates, the end of this lever *q* being connected by a rod *p²* with the engine-governing valve or mechanism.

The speed-regulating device operating in connection with the weight *a* comprises a spindle *f*, carried in a case *h*, through the end of which case it passes and bears on the upper side of the horizontal weight *a*, the spindle

being normally pressed down onto the weight by a spring *i*, and consequently offers a normal resistance to the upward movement of the weight *a*. The lower end of this spring presses upon the collar *f'* on the spindle *f*, while the tension on it is rendered variable by the threaded adjusting-plug *k*, which works and screws in and through the cover *l* of the case *h*. According to the extent this plug *k* is screwed into the case *h*, the degree of tension on the spring *i* will depend, and when adjusted to the desired position the plug *k* becomes automatically locked by the end of a spring-pressed locking-bolt *m*, working in a chamber *n* in the upper part of the cover *l* and operating in connection with a longitudinal groove *k'* in the plug *k*. The bolt *m* is normally pressed toward the plug by the spring *m'*. The groove *k'* and the operative end of the bolt *m* are somewhat rounded, so that while the bolt will hold the plug *k* in the position to which it has been adjusted and prevent it from turning round from vibration or jar or accidentally it will not prevent it being turned freely by the hand when it is desired to set the governor to provide an altered limit of speed in the engine, and this turning is effected by the handle *o*, fixed on the end of the plug *k*.

In action when the handle or head *o* of the plug *k* is rotated, which may be done while the engine is moving, the locking-bolt *m* will be pressed back out of the groove *k'* by the action of the sides of the groove upon it, and then when the groove comes back to the bolt the bolt is pressed into it by its spring *m'*, and the bolt is again locked.

The case *h* and the whole device are mounted by trunnions *h'* in bearings *c'* on the frame *c*, and the end of the spindle *f* fits in a recess in the side of the weight *a*.

To prevent the plug *k* from being screwed out of the device, it is provided with a shoulder *k²* within the cover *l*, and to prevent the cover *l* from slacking back it is provided with a locking-screw *l²*.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with a vibratory weight *a* of a reciprocated steam-engine governor, a

spring-pressed regulating-spindle *f* disposed
and pressing on one side of said weight; a
spring *i* on said spindle *f*; a case *h* in which
said spring and spindle are disposed and work;
5 an externally-threaded hollow spindle *k* screwing
through and projecting above the head of
the case *h*, and having a groove *k'* extending
along the outside of same; and a spring-pressed
locking-bolt *m*, the end of which works in the

groove *k'*, and disposed at right angles to said 10
spindle *k*; substantially as set forth.

In witness whereof we have hereunto set our
hands in presence of two witnesses.

JOHN TAYLOR.

DAVID HENRY EVANS.

Witnesses:

SOMERVILLE GOODALL,
LEONARD SAWLEY.